| Ref<br># | Hits           | Search Query   | DBs   | Default<br>Operator | Plurals | Time Stamp       |
|----------|----------------|--|-------|---------------------|---------|------------------|
| S1       | 341576         | michael trunz  | USPAT | OR                  | ON      | 2006/12/07 16:38 |
| S2       | 5938           | S1 and ccd   | USPAT | OR                  | ON      | 2006/12/07 16:27 |
| S3       | 1650           | S2 and (module or enclosure)   | USPAT | OR                  | ON      | 2006/12/07 16:15 |
| S4       | 754            | S3 and (housing or ceramic)  | USPAT | OR                  | ON      | 2006/12/07 16:17 |
| S5       | 450            | S4 and (plate or vibration)  | USPAT | OR                  | ON      | 2006/12/07 16:17 |
| S6       | 366            | S5 and (glass or seal or fasten or shut or hermetic\$5)              | USPAT | OR                  | ON      | 2006/12/07 16:19 |
| S7       | 341557         | michael trunz .in.   | USPAT | OR                  | ON      | 2006/12/07 16:27 |
| S8       | 5936           | S7 and ccd   | USPAT | OR                  | ON      | 2006/12/07 16:28 |
| S9       | 1648           | S8 and (module or enclosure)   | USPAT | OR                  | ON      | 2006/12/07 16:28 |
| S10      | 752            | S9 and (housing or ceramic)  | USPAT | OR                  | ON      | 2006/12/07 16:29 |
| S11      | 448            | S10 and (plate or vibration)   | USPAT | OR                  | ON      | 2006/12/07 16:30 |
| S12      | 364            | S11 and (glass or seal or fasten or shut or hermetic\$5)             | USPAT | OR                  | ON      | 2006/12/07 16:32 |
| S13      | 402            | S2 and (thermal and expansion)                                       | USPAT | OR                  | ON      | 2006/12/07 16:31 |
| S14      | 1709           | S2 and (thermal or expansion)  | USPAT | OR                  | ON      | 2006/12/07 16:31 |
| · S15    | 79             | S11 and (thermal adj1 expansion)                                     | USPAT | OR                  | ON      | 2006/12/11 14:26 |
| S17      | 0              | (michael adj1 trunz) and ((ccd adj1 module)or (ccd adj hous\$5))     | USPAT | OR                  | ON      | 2006/12/07 16:39 |
| S18      | 16             | (michael trunz .in.) and ((ccd adj1 module)or (ccd adj hous\$5))     | USPAT | OR                  | ON      | 2006/12/08 11:14 |
| S19      | 2              | ("0026001" "5321204").PN.  | USPAT | OR                  | ON      | 2006/12/11 13:36 |
| S20      | 341552         | michael trunz and ((ccd adj1<br>module)or (ccd adj hous\$5))         | USPAT | OR                  | ON      | 2006/12/11 14:23 |
| S21      | 20499          | CCD and (packag\$5 or hous\$5)                                       | USPAT | OR                  | ON      | 2006/12/11 15:05 |
| S22      | 1061           | S21 and (" thermal expansion")                                       | USPAT | OR                  | ON      | 2006/12/11 14:34 |
| S23      | 405            | S22 and (vibrat\$5)  | USPAT | OR                  | ON      | 2006/12/11 15:02 |
| S24      | 0              | S22 and (ccd near1 vibrat\$5)  | USPAT | OR                  | ON      | 2006/12/11 15:03 |
| S25      | 0              | S22 and (ccd near1 vibrat\$)   | USPAT | OR                  | ON      | 2006/12/11 15:04 |
| S26      | 0              | S22 and (ccd near5 vibrat\$)   | USPAT | OR                  | ON      | 2006/12/11 15:04 |
| S27      | 0              | S22 and (ccd near4 vibrat\$5)  | USPAT | OR                  | ON      | 2006/12/11 15:05 |
| S28      | 17             | S22 and (CCD near5 pad\$)  | USPAT | OR                  | ON      | 2006/12/12 15:13 |
| S29      | 87             | S21 and (CCD near5 pad\$)  | USPAT | OR                  | ON      | 2006/12/11 16:44 |
| S30      | <sup>-</sup> 5 | "5466488"  | USPAT | OR                  | ON      | 2006/12/12 15:13 |
| S31      | 12             | ccd near5 (vibration and (pad\$5 or cush\$5 or damp\$5 or reduc\$5)) | USPAT | OR                  | ON      | 2006/12/13 13:56 |

|     |       |  |       | •  |      |                  |
|-----|-------|--|-------|----|------|------------------|
| S32 | 17    | ccd adj15 (vibration and (pad\$5 or cush\$5 or damp\$5 or reduc\$5))                                     | USPAT | OR | ON   | 2006/12/13 14:04 |
| S33 | 3     | (ccd adj5 vibration) near5 (pad\$5 or cush\$5 or damp\$5 or reduc\$5)                                    | USPAT | OR | ON   | 2006/12/13.14:12 |
| S34 | 1761  | punctiform   | USPAT | OR | ON   | 2006/12/13 14:13 |
| S35 | 41    | quasi adj1 punctiform  | USPAT | OR | ON   | 2006/12/13 14:13 |
| S36 | 14    | (quasi adj1 punctiform) and (quiver\$5 or shiver\$5 or puls\$7 or tremb\$5 or vibrat\$5)                 | USPAT | OR | ON   | 2006/12/13 14:16 |
| S37 | 0     | ((quasi adj1 punctiform) and<br>(quiver\$5 or shiver\$5 or puls\$7 or<br>tremb\$5 or vibrat\$5)) and ccd | USPAT | OR | ON   | 2006/12/13 14:14 |
| S38 | 1     | (quasi adj1 punctiform)<br>with(quiver\$5 or shiver\$5 or puls\$7<br>or tremb\$5 or vibrat\$5)           | USPAT | OR | ON   | 2006/12/13 14:17 |
| S39 | 3     | (quasi adj1 punctiform) same<br>(quiver\$5 or shiver\$5 or puls\$7 or<br>tremb\$5 or vibrat\$5)          | USPAT | OR | ON   | 2006/12/13 14:19 |
| S40 | 0     | (quasi adj1 punctiform) same<br>(absorb\$5)  | USPAT | OR | ON   | 2006/12/13 14:20 |
| S41 | 0     | (quasi adj1 punctiform) near<br>(absorb\$5)  | USPAT | OR | ON   | 2006/12/13 14:20 |
| S42 | 0     | (quasi adj1 punctiform) near<br>(absor\$5)   | USPAT | OR | ON . | 2006/12/13 14:21 |
| S43 | 15564 | vibra\$5 near7 absorb\$5   | USPAT | OR | ON   | 2006/12/13 14:21 |
| S44 | 3020  | S43 with (enclos\$5 or hous\$5 or cas\$5 or hold\$5 or contain\$5 )                                      | USPAT | OR | ON   | 2006/12/13 14:24 |
| S45 | 45    | S44 same "anti"  | USPAT | OR | ON   | 2006/12/13 14:37 |
| S46 | 160   | S44 same "Circuit"   | USPAT | OR | ON   | 2006/12/13 14:41 |
| S47 | 0     | S46 same Punctiform  | USPAT | OR | ON   | 2006/12/13 14:38 |
| S48 | 0     | S46 same quasi   | USPAT | OR | ON   | 2006/12/13 14:38 |
| S49 | 55    | S46 same CCD   | USPAT | OR | ON   | 2006/12/13 14:55 |
| S50 | 55    | S49 and mount\$5   | USPAT | OR | ON   | 2006/12/13 14:56 |
| S51 | 55    | S49 and mount\$3   | USPAT | OR | ON   | 2006/12/13 15:20 |
| S52 | 45    | S49 and mount  | USPAT | OR | ON   | 2006/12/13 15:14 |
| S53 | 1039  | (Vibrat\$5 adj1 absorb\$5) with mount\$5   | USPAT | OR | ON   | 2006/12/13 15:25 |
| S54 | 1     | S53 Same CCD   | USPAT | OR | ON   | 2006/12/13 15:16 |
| S55 | 30    | S53 Same circuit   | USPAT | OR | ON   | 2006/12/13 15:21 |
| S56 | 442   | S53 and (internal)   | USPAT | OR | ON   | 2006/12/13 15:25 |
| S57 | 171   | S56 and protect\$5   | USPAT | OR | ON   | 2006/12/13 15:27 |
| S58 | 163   | S57 and connect\$5   | USPAT | OR | ON   | 2006/12/13 15:28 |

| S59 | 169    | S57 and (connect\$5 or attatch\$5 or join\$5 or fasten\$5 link\$5) | USPAT  | OR   | ON  | 2006/12/13 15:31 |
|-----|--------|--|--|------|-----|------------------|
| S60 | 81     | S59 and circuit  | USPAT  | OR   | ON  | 2006/12/13 15:32 |
| S61 | 81     | S59 and(circuit OR CCD)  | USPAT  | OR   | ON  | 2006/12/13 15:32 |
| S62 | 28     | S59 and ((circuit OR CCD) same mount\$5)                           | USPAT  | OR   | ON  | 2006/12/13 15:58 |
| S63 | 3      | S62 and (vibration near5 reduc\$10)                                | USPAT  | OR   | ON  | 2006/12/13 16:01 |
| S64 | 0      | S62 and ((CCD or Circuit) adj3 mount)                              | USPAT  | OR   | ON  | 2006/12/13 16:01 |
| S65 | 8      | S62 and ((CCD or Circuit) adj3 mount\$5)                           | USPAT  | OR   | ON  | 2006/12/13 16:05 |
| S66 | 120552 | "347"/ "207.99"  | USPAT  | OR   | ON. | 2006/12/13 17:27 |
| S67 | 0      | (347"/"207.99).CCLS.   | USPAT;<br>USOCR  | OR   | OFF | 2006/12/13 17:27 |
| S68 | 517    | (348/207.99).CCLS.   | USPAT;<br>USOCR  | OR   | OFF | 2006/12/13 17:36 |
| S69 | 10     | S68 and (CCD same vibrat\$5)                                       | USPAT  | OR   | ON  | 2006/12/13 17:39 |
| S70 | 1      | S68 and (CCD adj5 vibrat\$5)                                       | USPAT  | OR   | ON  | 2006/12/13 17:30 |
| S71 | 0      | ("L41and(plat\$5ormount\$5orabsorb<br>\$5)").PN.                   | USPAT;<br>USOCR  | OR . | OFF | 2006/12/13 17:33 |
| S72 | 0      | ("L41and(plat\$5ormount\$5orabsorb<br>\$5)").PN.                   | USPAT;<br>USOCR  | ·OR  | OFF | 2006/12/13 17:33 |
| S73 | 0      | ("L41andMount").PN.  | USPAT;<br>USOCR  | OR   | OFF | 2006/12/13 17:33 |
| S74 | 44     | S68 and mount  | USPAT  | OR   | ON  | 2006/12/13 17:36 |
| S75 | 47     | S68 and Mount  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON  | 2006/12/13 17:38 |
| S76 | 38     | S68 and absorb\$5  | USPAT  | OR   | ON  | 2006/12/13 17:36 |
| S77 | 22     | S76 and Moun\$5  | USPAT  | OR   | ON  | 2006/12/13 17:37 |
| S78 | 1      | S68 and (CCD adj1 vibrat\$5)                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ÓN  | 2006/12/13 17:38 |

| S79  | 0    | S68 and (circuit adj1 vibrat\$5)                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/13 17:38 |
|------|------|--|--|----|------|------------------|
| S80  | 1248 | 348/207.99   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON , | 2006/12/13 17:48 |
| S81  | 1    | S80 and (CCD adj1 packag\$5)                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/13 17:42 |
| S82  | 4    | S80 and ((CCD or Sensor\$5 or Modul\$5)adj1 packag\$5) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/13 17:43 |
| \$83 |      | S80 and ((circuit or CCD) adj1 pack\$5)                | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/13 17:56 |
| S84  | 283  | S80 and module   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/13 17:48 |
| S85  | 220  | S84 and (CCD or circuit)                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/13 17:50 |

| S86 | 125  | S85 and mount\$5                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/13 17:49 |
|-----|------|------------------------------------|--|----|----|------------------|
| S87 | 225  | S84 and ((CCD package) or circuit) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/13 17:50 |
| S88 | 172  | S84 and (CCD package)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/13 17:50 |
| S89 | 1    | S84 and (CCD near5 package)        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/13 17:51 |
| S90 | 0    | 207.99/294                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/13 17:58 |
| S91 | 1554 | 348/294                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/13 18:00 |
| S92 | 0    | 348/207.99/294                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/13 17:58 |

| S93      | 1               | S91 and (CCD adj1 mount)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/13 18:00 |
|----------|-----------------|--|--|----|----|------------------|
| S94      | 0               | ("2006/0132631").URPN.   | USPAT  | OR | ON | 2006/12/14 09:59 |
| S95      | 0               | ("2006/0132631").URPN.   | USPAT  | OR | ON | 2006/12/14 09:59 |
| S96      | 0               | ("2006/0132631").URPN.   | USPAT  | OR | ON | 2006/12/14 10:00 |
| S97      | 0               | 207.99/294.ccls.   | USPAT  | OR | ON | 2006/12/14 10:06 |
| S98      | 0               | 207.99/294.ccls  | USPAT  | OR | ON | 2006/12/14 10:06 |
| S99      | 0               | 348/294.ccis   | USPAT  | OR | ON | 2006/12/14 10:06 |
| S10<br>0 | 477             | 348/294.ccls.  | USPAT  | OR | ON | 2006/12/14 10:06 |
| S10<br>1 | 0               | S100 and (Vibrat\$5 adj1 plat\$5)  | USPAT  | OR | ON | 2006/12/14 10:07 |
| S10<br>2 | 4               | S100 and (CCD near mount\$5)   | USPAT  | OR | ON | 2006/12/14 10:08 |
| S10<br>3 | 9               | ("3757127"   "4113354"  <br>"4594613"   "4682219"   "4692608"<br>  "4745470"   "4773396"  <br>"5021888"   "5040069").PN. | US-PGPUB;<br>USPAT;<br>USOCR   | OR | ON | 2006/12/14 10:54 |
| S10<br>4 | 31              | ("4594613").URPN.  | USPAT  | OR | ON | 2006/12/14 17:14 |
| S10<br>5 | 11              | ("3757127").URPN.  | USPAT  | OR | ON | 2006/12/14 17:04 |
| S10<br>6 | 0               | (S104 and S105) and (vibrat\$5)  | USPAT  | OR | ON | 2006/12/14 17:14 |
| S10<br>8 | 0               | ("6861720").URPN.  | USPAT  | OR | ON | 2006/12/15 11:32 |
| S10<br>9 | 40              | punctiform\$5 near10 bond\$5   | USPAT  | OR | ON | 2006/12/15 15:12 |
| S11<br>0 | 70 <sub>.</sub> | punctiform\$5 near10 bond\$5   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 15:29 |

| S11<br>1 | 27  | (punctiform\$5 near10 bond\$5) and (economic\$5 or vibrat\$5 or cool\$5)    | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 15:32 |
|----------|-----|---|--|----|----|------------------|
| S11<br>2 |     | (punctiform\$5 near10 bond\$5) near10 (economic\$5 or vibrat\$5 or cool\$5) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 15:32 |
| S11<br>3 | 40  | (punctiform\$5 ) near10<br>(economic\$5 or vibrat\$5 or cool\$5)            | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 15:54 |
| S11<br>4 | 432 | punctiform\$5 same (mount\$5 or substrat\$5)                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 17:27 |
| S11<br>5 | 9   | (punctiform\$5 near5 bond\$5)same<br>(mount\$5 or substrat\$5)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 16:00 |
| S11<br>6 | 104 | (narrow near3 (joint\$5 or<br>mount\$5)) near5 substrat\$5                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 16:06 |
| S11<br>7 | 173 | (narrow near3 substrat\$5) near3<br>(connect\$3 or joint\$5 or bond\$5)     | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 16:07 |

| S11<br>8 | 173 | ((narrow or punctiform) near3<br>substrat\$5) near3 (connect\$3 or<br>joint\$5 or bond\$5)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR . | ON | 2006/12/15 16:09 |
|----------|-----|---|--|------|----|------------------|
| S11<br>9 | 0   | (((narrow or punctiform) near3<br>substrat\$5) near3 (connect\$3 or<br>joint\$5 or bond\$5)) same CCD   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 16:09 |
| S12<br>0 | 0   | (((narrow or punctiform) near3<br>substrat\$5) near3 (connect\$3 or<br>joint\$5 or bond\$5)) with CCD   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR . | ON | 2006/12/15 16:09 |
| S12<br>1 | 0   | (((narrow or punctiform) near3<br>substrat\$5) near3 (connect\$3 or<br>joint\$5 or bond\$5)) near50 CCD   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 16:10 |
| S12<br>2 | 36  | (((narrow or punctiform) near3<br>substrat\$5) near3 (connect\$3 or<br>joint\$5 or bond\$5)) near50 (CCD or<br>IC or (charge coupled device) or<br>(Integrated Circuit) or circuit) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 16:41 |
| S12<br>3 | 160 | ((substrat\$5 or carrier) near5<br>bond\$5) with CCD  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 16:43 |
| S12<br>4 | 115 | S123 and (packag\$5 or case or casing or (adhesiv\$5 and joint))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 16:54 |

| S12<br>5 | 7     | CCD near (carrier and substrate)                        | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/15 16:56 |
|----------|-------|---|--|----|------|------------------|
| S12<br>6 | 13244 | CCD and (carrier and substrate)                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON . | 2006/12/15 16:56 |
| S12<br>7 | 131   | S126 and ((adhesiv\$5 or solder\$5)near bond)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/15 16:58 |
| S12<br>8 | 108   | S127 and (modul\$5 or packag\$5 or housing)             | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/15 16:59 |
| S12<br>9 | 8     | S127 and (sensor near (module or packag\$5 or housing)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/15 17:01 |
| S13<br>0 | 0     | S127 and (sensor near mount)                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/15 17:01 |
| S13<br>1 | 83    | S127 and sensor   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/12/15 17:01 |

| S13<br>2 | 76     | S131 and adhesive  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 17:02 |
|----------|--------|--|--|----|----|------------------|
| S13<br>3 | 76     | S132 and (adhesive bond)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 17:02 |
| S13<br>4 | 41     | S132 and (adhesive adj5 bond)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 17:02 |
| S13<br>5 | 11     | ("3757127").URPN.  | USPAT  | OR | ON | 2006/12/15 17:04 |
| S13<br>6 | 6300   | (ccd (sensor or module)) and (substrate near bond\$5)                  | USPAT  | OR | ON | 2006/12/15 17:05 |
| S13<br>7 | 6866   | (ccd (sensor or module)) and ((substrate or carrier) near bond\$5)     | USPAT  | OR | ON | 2006/12/15 17:06 |
| S13<br>8 | 90     | (ccd (sensor or module)) near<br>((substrate or carrier) near bond\$5) | USPAT  | OR | ON | 2006/12/15 17:23 |
| S13<br>9 | 448891 | S138 (minimum and contact)   | USPAT  | OR | ON | 2006/12/15 17:23 |
| S14<br>0 | 39     | S138 and (minimum and contact)   | USPAT  | OR | ON | 2006/12/15 17:24 |
| S14<br>1 | 28     | S138 and ((minimum or contact) near substrate)                         | USPAT  | OR | ON | 2006/12/15 17:26 |
| S14<br>2 | · 2    | S114 and (heat\$3 adj1 flux\$3)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 17:30 |
| S14<br>3 | 1      | punctiform near (heat\$3 adj1<br>flux\$5)                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/12/15 17:31 |

| S14<br>4 |      | (punctiform or bond or adhesive) near (heat\$3 adj1 flux\$5)                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 17:32 |
|----------|------|---|--|------|----|------------------|
| S14<br>5 | 2    | (quasi adj3 punctiform) near connection   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR · | ON | 2006/12/15 17:33 |
| S14<br>6 | 2    | (quasi adj3 punctiform) near<br>(connection or bond)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 17:34 |
| S14<br>7 | 3    | (quasi adj3 punctiform) same<br>(substrate or housing)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 17:34 |
| S14<br>8 | 1971 | ((module or packag\$3 or hous\$3)<br>and (solder\$3 or (solder\$3 adj1<br>joint))) near substrate | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 17:37 |
| S14<br>9 | 2    | S147 and (CCD or ("charge coupled device"))   | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 17:38 |
| S15<br>0 | 2    | S147 and CCD  | US-PGPUB;<br>USPAT;<br>USOCR;<br>FPRS;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON | 2006/12/15 17:38 |
| S15<br>1 | 10   | ("6020646").URPN.   | USPAT  | OR   | ON | 2006/12/15 17:40 |

|          |        |   |                              | ·  | r  |                  |
|----------|--------|---|------------------------------|----|----|------------------|
| S15<br>2 | 12     | ("4044374"   "4760440"  <br>"5021888"   "5418566"   "5495450"<br>  "5763943"   "5767564"  <br>"5786589"   "5867368"   "5869855"<br>  "5869896"   "5949655").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 13:51 |
| S15<br>3 | 901533 | thermal expansion coefficient   | USPAT                        | OR | ON | 2006/12/18 13:32 |
| S15<br>4 | 307862 | CCD module  | USPAT                        | OR | ON | 2006/12/18 13:33 |
| S15<br>5 | 125    | "CCD module"  | USPAT                        | OR | ON | 2006/12/18 13:33 |
| S15<br>6 | 5902   | substrate near5 (aluminum near3 oxide)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 13:45 |
| S15<br>7 | 12     | S156 and (CCD adj5 (package or module or substrate or housing))   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 13:47 |
| S15<br>8 | 12     | S156 and ((aluminum oxide) near housing)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 13:47 |
| S15<br>9 | 14935  | (aluminum adj1 oxide) same (CCD or (charge coupled device))   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 13:52 |
| S16<br>0 | 59     | S159 and (CCD with (substrate or carrier or housing))   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 13:53 |
| S16<br>1 | 130    | S159 and (CCD same ((substrate or carrier or housing)) and (aluminum adj1 oxide))   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:20 |
| S16<br>2 | 28     | S161 and ((aluminum adj1 oxide) with (substrate or housing))  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:25 |
| S16<br>3 | 7      | S161 and ((aluminum adj1 oxide) adj5 (substrate or housing))  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:20 |
| S16<br>4 | 0      | S161 and ((aluminum adj1 oxide)<br>near ( housing) )  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:20 |
| S16<br>5 | 0      | S161 and (CCD adj1 housing)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:21 |
| S16<br>6 | 130    | S161 and (CCD)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:21 |
| S16<br>7 | 1      | S161 and (CCD near packag\$5)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:24 |

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|------------|-------|---|------------------------------|------|------|------------------|
| S16<br>8   | . 0   | S161 and (CCD near module)  | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:24 |
| S16<br>.9  | 10147 | (aluminum adj1 oxide) with (packag\$5 or module or housing or substrate)  | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:25 |
| S17<br>0   | 4853  | S169 and ((CCD or charge coupled device) with (assembly or package or module or substrate))   | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:31 |
| S17<br>1   | 19    | S170 and (housing near (aluminum oxide))  | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:28 |
| S17<br>2   | 4853  | S170 and ((CCD or charge coupled device) with (assembly or package or module or substrate))   | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:32 |
| S17<br>3   | 4853  | S170 and (aluminum adj1 oxide)  | US-PGPUB;<br>USPAT;<br>USOCR | OR . | ON   | 2006/12/18 14:32 |
| S17<br>4   | 0     | S173 and (ccd near module)  | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:33 |
| S17<br>5   | 179   | S173 and ccd  | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON . | 2006/12/18 14:33 |
| S17<br>6   | 176   | S175 and substrate  | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:33 |
| S17<br>7 . | 179   | S175 and aluminum   | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:33 |
| S17<br>8   | 18    | S175 and housing  | US-PGPUB;<br>USPAT;<br>USOCR | OR , | ON   | 2006/12/18 14:35 |
| S17<br>9   | 23    | "6020646"   | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:36 |
| S18<br>0   | 12    | ("4044374"   "4760440"  <br>"5021888"   "5418566"   "5495450"<br>  "5763943"   "5767564"  <br>"5786589"   "5867368"   "5869855"<br>  "5869896"   "5949655").PN. | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:38 |
| S18<br>1   | 22758 | (aluminum oxide) same ((thermal expansion) near1 coefficient)   | US-PGPUB;<br>USPAT;<br>USOCR | OR . | ON   | 2006/12/18 14:39 |
| S18<br>2   | 0     | ((aluminum oxide) with ((thermal expansion) near1 coefficient))near CCD   | US-PGPUB;<br>USPAT;<br>USOCR | OR   | ON   | 2006/12/18 14:39 |

|          |       |  | _                            |    |    |                  |
|----------|-------|--|------------------------------|----|----|------------------|
| S18<br>3 | 10716 | ((aluminum oxide) with ((thermal expansion) near1 coefficient))  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:39 |
| S18<br>4 | 1913  | ((aluminum oxide) with ((thermal expansion) near1 coefficient)) same (CCD or housing or package or assembly or module) | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:41 |
| S18<br>5 | 10358 | (glass and (aluminum oxide)) with (thermal expansion)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:42 |
| S18<br>6 | 11073 | (glass and (aluminum oxide)) with (thermal expansion coefficient)  | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:42 |
| S18<br>7 | 539   | ((glass and (aluminum oxide)) with (thermal expansion coefficient)) same difference                                    | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:43 |
| S18<br>8 | 11079 | ((glass and (aluminum oxide)) with (thermal expansion coefficient)) withdifference                                     | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:43 |
| S18<br>9 | 207   | ((glass and (aluminum oxide)) with (thermal expansion coefficient)) with difference                                    | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:46 |
| S19<br>0 | 1     | ((glass and (aluminum adj1 oxide))<br>with (thermal expansion<br>coefficient)) with difference                         | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:48 |
| S19<br>1 | 1     | S190 and (aluminum adj1 oxide)   | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON | 2006/12/18 14:48 |